EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	3	(hough.in.) and (real adj1 estate)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/05/28 10:25
L2	29	("4648037" | "4742457" | "4831526" | "5006998" | "5032989" | "5083270").PN. OR ("5414621").URPN.	US-PGPUB; USPAT; USOCR	OR	OFF	2006/05/28 10:28

forward and Backward search of

The best reference

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation) and ("705"/$).ccls.	EPO; JPO; DERWENT	OR	ON	2006/05/28 10:11
L2	116	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation) and ("705"/$).ccls.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/28 10:11
S1	2	"20020165817".pn.	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	OFF	2006/05/28 09:10
S4	2679	(house or (real adj2 (estate or property) or home or resedent$3 or property) near10 (valu$5 or asses$4)) same (internet or network) same (parties or entities or services)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/28 09:16
S5	258	S4 and (given or predefined or predetermined or selected) near4 (real or house or home)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/28 09:18
S6	258	S4 and ((given or predefined or predetermined or selected) near4 (real or house or home))	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/28 09:19
S7	267	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation)	US-PGPUB; USPAT; EPO; JPO; DERWENT	OR	ON	2006/05/28 09:20
S8	144	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation)	US-PGPUB; EPO	OR	ON	2006/05/28 09:20
S9	144	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation)	US-PGPUB; EPO	OR	ON	2006/05/28 09:22
S10	229	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation)	US-PGPUB; USPAT	OR	ON	2006/05/28 09:22
S11	116	((given or predefined or predetermined or selected) near4 (real or house or home)) near20 (valuation or price or pricing or evaluation) and ("705"/$).ccls.	US-PGPUB; USPAT	OR	ON	2006/05/28 10:10

full review of "KWIC" paragraphs for pertinence 5/28/06

Set   Items   Description
S1   35143   ((HOUSE OR (REAL (1W) ESTATE) OR (REAL (1W) PROPERTY) (10N)
        (VALUATION OR EVALUATION OR PRICING)) (10N) (METHOD OR MODEL
        OR ALGORITHM))
S2   1594   ((HOUSE OR (REAL (1W) ESTATE) OR (REAL (1W) PROPERTY)) (10-
        N) (VALUATION OR EVALUATION OR PRICING) (10N) (METHOD OR MODEL
        OR ALGORITHM))
S3   1   S2 (S) (INTERNET OR NETWORK) (S) ((INPUT??? ? OR ENTER??? -
        ?) (5N) (INFORMATION OR DATA))
S4   489   S2 AND (NETWORK OR INTERNET)
S5   192   S4 AND PY<2001
S6   100   RD S5 (unique items)
S7   49   S6 AND (BROKER OR AGENT OR COMPARABLE OR SIMILAR?? ?)

[handwritten: reviewed all pertinent references listed below 5/28/06]

7/3,K/1   (Item 1 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

02326819 107834586
High-tech valuation: should artificial neural networks bypass the human valuer?
Lenk, Margarita M.; Worzala, Elaine M.; Silva, Ana
Journal of Property Valuation & Investment v15n1 PP: 8-26 1997
JRNL CODE: PRVF
WORD COUNT: 6342

...ABSTRACT: the estimation errors associated with these 2 methods of mass
valuation. Specifically, 3 artificial neural network models and one
hedonic pricing model were created and tested for their ability to perform

...

...TEXT: pound foolish. An additional focus of this research is to
determine whether the artificial neural network models perform better
than hedonic pricing models in the task of estimating values of "outlier...

...1992) and Tay and Ho (1991/92) who report minimal errors associated with
their neural network models. Furthermore, the results support prior
research conclusions that mass valuation techniques are unacceptable

estimators...

...investment in human capital and computer time must be considered in order to obtain a network model with optimal predictive performance. Shortcuts taken during these steps have significant negative effects on...

...that result.

Section two of this paper reviews the literature regarding the application of hedonic pricing models and neural networks to real estate property valuation. Since the hedonic pricing model is more commonly understood and used for real estate purposes, the focus of this section explores the use of neural networks. Section three describes...
...for properties that are dissimilar from the prediction model's training data set.

Artificial neural network models have been offered as a possible solution to many of these problems. The use of these models is similar to the process utilized in building hedonic pricing models: an artificial neural network model must first be trained from a set of data and the model is then...

...sales price). The weighted summation function typically used in a feed-forward/back-propagation neural network model is:

(1)

where X_i is the input values and W_{ij}...monotonicity, and continual differentiability properties (Borst, 1992; Trippi and Turban, 1993).

Feed-forward/back-propagation network models are the most common form of artificial neural network models. These artificial neural network algorithms typically begin with randomly determined or equal default weights for each of the nodes...
...the hidden layer(s). As each model-training property is entered into the model, the network sums and transforms the values of the input variables into the predicted output value(s). The model then compares the neural network's estimated price to the actual price. If a discrepancy exists, then the software works...

...layer weights in such a way that will minimize the prediction error. These adjustments are similar in nature to the adaptive estimation techniques used in traditional real estate assessment. While training, artificial neural network models repeat these steps as the data for

each new property are added, always adjusting...

...layer weights to minimize the total prediction error (Allen and Zumwalt, 1994).

An artificial neural network stops training when it reaches a preset internal error threshold, either the software's default...

...researcher's predesignated error threshold. Such a threshold is needed because without one, a neural network would effectively memorize, or "over-train" on, the training data, and its predictive ability towards...
...of artificial neural networks (Trippi and Turban, 1993).

Several studies have specifically applied artificial neural network analysis to residential real estate valuation. Do and Grudnitski (1992, 1993) and Worzala et al...

...training samples.

Do and Grudnitski (1992) reported significant superior predictive performance by their artificial neural network model when estimating 105 residential property values. Their neural network model results contained twice the number of predicted values within 5 per cent of actual
...

...40 per cent vs. 20 per cent). Furthermore, the mean absolute error from their neural network model was significantly lower than the mean absolute error from the hedonic model (6.9...

...neural networks using a very large sample of residential apartment properties in Singapore. Their neural network model resulted in a much lower mean absolute error when compared to their hedonic model...
...of several output layer nodes to represent different price ranges or markets. Borst's neural network model boasted low mean absolute errors (8.7 per cent to 12.4 per cent...

...they investigated the effects on the average prediction error when outliers were removed. Their neural network model resulted in mean absolute errors between 5 per cent and 7 per cent. They...

...and Borst (1992). These researchers were unable to replicate the superiority of the artificial neural network model over the more traditional hedonic model when they applied the methodology of the prior...

...within the hidden layer(s), and the hidden layer error threshold levels of their neural network model. In each case tested, their hedonic

pricing model either did better than or performed similarly to their best artificial neural network model.

Other finance-related research studies have also found deficiencies in the ability of artificial...

...number of these studies and present an example of the effects of utilizing artificial neural network models for predicting stock price movements. They conclude that optimal artificial neural network models are highly dependent on the specific data set used and time periods studied. In...produce opposite results. They argue that serious reservations should be considered when utilizing artificial neural network models in finance-related fields.

Data and methodology

This research compares the predictive performance of...

...the dependent variable for the hedonic model and the output layer for the artificial neural network model[4].

Outlier properties were determined as properties that possessed a z-score greater than...

...was utilized to create the hedonic pricing model, and two feed-forward, back-propagation neural network software packages, @Brain (Talon Development Corporation, 1992) and NeuroShell (Ward Systems Group, Inc., 1990), were used to construct the artificial neural network models.

Previous neural network research choices were supported in regard to the determination of the appropriate number of nodes...

...Tay and Ho, 1991/1992). A sequential trial-and-error methodology is utilized, and numerous network models were created before the optimal number of nodes in the hidden layer of the...

...the actual sales price.

The "best-fit" option in the @Brain software makes its neural network model building much more "user-friendly" than other software by removing the need for the user to determine the internal error threshold level. This option creates a network that automatically stops the training when the internal errors are "minimized". Unfortunately, the authors of...

...fit" option do not report this option's minimum error threshold. Since most novice neural network creators would take advantage of this

option, the results section of this paper also presents...

...Brain "best-fit" results for comparison with the other controlled, manually-determined internal error threshold network models created by NeuroShell and @Brain.
The optimal controlled internal error threshold level was then determined with a similar trial-and-error procedure. While maintaining constant the number of hidden layer nodes determined in...

...hidden layer nodes.

While the prior process minimizes the structural differences between the two neural network models, there still remain differences between the software packages' definitions of internal error. For example, in @Brain, the user must choose whether the network should stop training when:

- the average of the errors of the training sample falls below...

...this study as it is the closest to the NeuroShell definition which indicates that the network should stop training when the sum of the squares of the errors of the training...

...Three criteria were used for comparing the predictive performance of the hedonic model, the two comparable artificial neural network models, and the "best-fit" @Brain neural network model:

- (1) the mean absolute prediction error in each model;
- (2) the maximum absolute prediction...properties in both the training set and normal holdout sample was approximately $120,000, and similar standard deviations are observed. Property prices in these two subsets ranged from $58,900 to...

...the results of the 12 "best" artificial neural networks created during this procedure. No one network model exhibited superiority in all three performance criteria: the minimum mean absolute prediction error, the
...

...of properties with less than a 5 per cent absolute prediction error. For example, the network model created with ten hidden layer nodes had the lowest mean absolute error (9.4 per cent), while the network model created with six hidden layer nodes had the most predicted values within 5 per cent of the actual sales price. Preference was given to the network model which predicted the most sales prices within 5 per cent of the actual price...

...the artificial neural networks was determined from that procedure. The

results of the nine "best" network models are displayed in Table IV.
The network with the internal error threshold of 0.003 demonstrated
the greatest percentage of predicted sales...
...mean absolute error and maximum absolute error test results. The normal
holdout sample results are similar in the two types of model. When
measured by the mean absolute error test, the hedonic model outperformed
all three of the artificial neural networks, but the best network
model mean absolute error was very similar (9.7 per cent vs. 11.1 per
cent). While it could be argued thatsimilar predictive performance
with 26 houses, or 38.8 per cent, with less than a 5...

...unacceptable by most lenders. With this interpretation, the optimal
performer was the "best-fit" @Brain network with 17.9 per cent of the
sample possessing greater than a 15 per cent...

...two neural networks (22.4 per cent vs. 29.9 per cent for the NeuroShell
network and 28.4 per cent for the forced @Brain network).

The results from the "outlier" sample tests support the contention that
these properties should not...

...exhibited greater than a 15 per cent error of the actual sales price.
One neural network, the forced @Brain, actually estimated all 17 of
the properties with greater than a 15...
...with the findings presented by Do and Grudnitski (1992) who reported
results from a neural network model that exhibited half of the error
level of their hedonic pricing model. The results...

...1995) who concluded that data issues may mitigate the consistent success
of the artificial neural network models for real estate valuation.

The results of this study indicate that there may be...

...the estimation errors associated with these two methods of mass
valuation. Specifically, three artificial neural network models and
one hedonic pricing model were created and tested for their ability to
perform...

...this study. At least 18 per cent of the value estimations of both the
neural network models and the hedonic pricing model had absolute
estimation errors in excess of 15 per...

...reasonable and appropriate for most residential valuation assignments.

The results also indicate that artificial neural network models do
not necessarily outperform hedonic models, contradicting some of the recent

reports of neural network superiority. This research documents very similar performance between the hedonic model and the artificial neural networks. Moreover, the choice of performance measure dictated which technique was superior.

Plenty of avenues exist for further artificial neural network research in property valuation. Further research needs to clarify which factors reduce the risks associated...

...use of mass valuation techniques in general, and specifically with the use of artificial neural network models. More research could determine if other software packages and/or other data sets experience similar results or overcome the weaknesses described in this paper. For example, the current results might...to be exercised, however, as errors may still be substantial.

- (2) If an artificial neural network model is to be used, the process and results of this research support a trial-and-error strategy to find the optimal artificial neural network model. It was only through this strategy that the neural network models created in this research could compete with the hedonic pricing models. For example, if...
...Working Paper Series No. 94-102.

6. Do, Q. and Grudnitski, G. (1992, "A neural network approach to residential property appraisal", The Real Estate Appraiser, December, pp. 38-45.

7. Do, Q. and Grudnitski, G. (1993, "A neural network analysis of the effect of age on housing values", The Journal of Real Estate Research... Appraisal Journal, October, pp. 498-517.

22. Newsome, B.A. and Zietz, J. (1992, "Adjusting comparable sales using multiple regression analysis - the need for segmentation", Appraisal Journal, January, pp. 129-35...

...of Political Economy, Vol. 82, pp. 34-55.

25. Talon Development Corporation (1992, @Brain Neural Network Development System, Version 1.4, Talon Development Corporation, Milwaukee, WI.

26. Tay, D.P.H...
...Finance and Investing, Probus Publishing, Chicago, IL.

28. Ward Systems Group, Inc. (1990, NeuroShell Neural Network Shell Program, Release 3.3, Ward Systems Group, Inc., Frederick, MD.

29. Williams, T. (1994...

...4; Element 4; Table II; Results from the hedonic pricing model; Table III; Alternative neural network models derived with @ Brain varying the number of hidden layer nodes; Table IV; Comparison of alternative neural network models with NeuroShell to determine the appropriate error threshold level (using six hidden layer nodes...

...maximum absolute error tests for the alternative models; Figure 1; Structure of the artificial neural network models; Table VI; Predictive power of the four alternative models; Table VII; Individual prediction errors...

7/3,K/2   (Item 2 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

02326818 107834584
Interactive application of computer assisted mass appraisal and geographic information systems
McCluskey, William; Deddis, William; Mannis, Adam; McBurney, Dillon; Borst, Richard
Journal of Property Valuation & Investment v15n5 PP: 448 1997
JRNL CODE: PRVF
WORD COUNT: 6548

...TEXT: merchant banks, or the new Building Society Banks, could enter the valuer's or estate agent's domain. Within the property industry, many areas of professional activity will need to respond...In mass appraisal modelling the aim is to try and replicate the market within which real estate is traded and to derive a representative mathematical model which achieves this aim. Thus, valuation models developed for mass appraisal purposes must represent supply and demand patterns for groups of...

...uniformity.

In single property appraisal, quality can usually be measured by direct comparison with specific comparable sales. In both approaches the valuer will be required to defend his assessment of value...

...one value and find ways of extending a single valuation decision to all properties with similar characteristics."

Mass appraisal in essence evolved out of the need to provide uniformity and consistency...

...rather than showing the mathematical functional form of the models;

- (7) explainability is enhanced through comparable transactions, which have traditionally provided the main source of evidence in defending assessments.

Mass appraisal...error of 0.2 per cent on a holdout sample. McCluskey (1996) applied a neural network to a set of 416 residential property sales and achieved a mean absolute error of...

...of this paper it was decided to apply MRA in association with a computer based comparable selection technique, known as comparable sales analysis (CSA). The basic design of this hybrid modelling approach is to apply MRA...

...made to the selected properties by deletions and additions of money amounts to make the comparable a notional physical replica to the subject. The approach utilizes distance to establish a measure of comparability between the subject and the comparable. This "distance" (sometimes referred to as Mahalanobis distance) can be calculated as follows.

Comparable sales analysis procedure may be viewed as a four part process:

- (1) For a given subject property, finding the n most comparable sales.

- (2) Adjusting the selling prices of the comparables to match the characteristics of the...

...finding comparables utilizes "distance" to establish a measure of comparability between the subject and the comparable under consideration. It is computed by weighting the differences in characteristics between the subject and the comparable.
The distance, D is calculated as follows:

where:

- = Minkowski exponent lambda.

- A_i= Weight...factor weights are chosen considering the magnitude of the variable itself. For example if a comparable is not in the same

9

ward group the contribution (before raising to the power of...

...is 2 because the range and magnitude of the factor is quite large.

For each comparable property the sales price is adjusted to the subject property as follows:

- Adjusted sales price = sales price - (comparable MRA - subject MRA)

Given the several comparable sales, several adjusted selling prices are obtained. A weighted estimate is formed as follows:

where:
and

- ASP_i= Adjusted Sale Price for Comparable i

- SP_i= Sale Price of Comparable I

- D_i= Distance for Comparable I

- D is Max of D_i

Thus the weighted estimate of value places...

...a variable with larger numerical size has a smaller weight. This process of computing several comparable sales estimates of value, a weighted estimate of value and an MRA estimate of value yields, in the case of five comparable sales, seven estimates of value.

The results of the comparables selection routine is to identify...

...prices of the comparables, is used to value the subject (Fraser and Blackwell, 1988).
The comparable sales analysis approach lends itself more easily to produce defensible assessed values. Its output is...preliminary research has attempted to apply a hybrid modelling technique combining multiple regression analysis and comparable sales analysis in order to improve both predictive ability and explainability. Given the complex nature...

...but there is this apparent lack of transparency when it come to explaining value. Incorporating comparable sales within the process allows the valuer to apply complex models while being able to...

...and Assessment Administration, IAAO, Chicago, IL.

5. Fraser, R.R. and Blackwell, F.M. (1988, "Comparable selection and multiple regression in estimating real estate value: an empirical study", Journal of Valuation...Ashgate, Aldershot.

15. McCluskey, W.J. and Borst, R.A. (1997, "An evaluation of MRA, comparable sales analysis, and ANNs for the mass appraisal of residential properties in Northern Ireland", Assessment...

7/3,K/3   (Item 3 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

02326766 107834516
International property portfolio strategies Problems and opportunities
Lizieri, Colin; Finlay, Louise
Journal of Property Valuation & Investment v13n1 PP: 6-21 1995
JRNL CODE: PRVF
WORD COUNT: 6747

...ABSTRACT: misleading "optimal" strategies. In particular, the favoured locations for investment are all driven by very similar economic fundamentals; in a rapidly-integrating global economy, this is unlikely to generate consistent long...
...TEXT: analysis and performance measurement techniques utilized in the other asset markets would be applied to real estate. The set of techniques rooted in "Portfolio Theory" - which encompasses Markowitz mean-variance analysis, the capital asset pricing model (CAPM) and arbitrage pricing theory - has been extensively applied to property (for examples and reviews...

...misleading "optimal" strategies. In particular, the favoured locations for investment are all driven by very similar economic fundamentals; in a rapidly-integrating global economy, this is unlikely to generate consistent long...risk and return performance as was shown over the period of the study".

In a similar vein, the Prudential Realty Group (assisted by JLW and Real Estate Strategy Ltd) highlighted London...property markets and other sectors (not to mention other asset classes). Fund managers are not similarly constrained and thus the solutions generated by the formal models are unlikely to accord with...

...and liberalization of capital flows;

- the internationalization of finance and the creation of an integrated

network of financial centres trading on a 24-hour basis.

These changes have had profound implications...

...of financial markets and have substantially decoupled them from industrial production. In the global financial network, key centres, London, New York and Tokyo, have emerged as the major world cities, with a number of secondary centres acting as co-ordinating nodes in the network of capital flows (Lizieri and Palmer, 1992; LPAC, 1991; O'Brien, 1992; Sassen, 1991). These...

...may occur because of:

- institutional portfolios coming increasingly to dominate investment markets: decision makers using similar tools and inputs are likely to arrive at broadly similar buy-sell decisions;

- the growing use of index-tracking strategies and portfolio insurance systems binding...Journal, July-August, pp. 15-26.

17. Ennis, R. and Burik, B. (1991), "Pension fund real estate investment under a simple equilibrium pricing model", Financial Analysts Journal , May-June, pp. 20-30.

18. Findlay, M., Hamilton, C., Messer, S. and Yormark, J. (1979), " Optimal real-estate portfolios", AREUEA Journal, Vol. 7, pp. 298-317.

19. Fogler, H. (1984), "20% in real...

...TEXT: share their views on the downturn in volume, hot property types, the role of the Internet in commercial lending and the outlook for small independents.

These Midwest mortgage bankers see a...terms, etc., will definitely increase-as will the efficiency and speed to market which the Internet can provide," he says.

Bill Ballent, Central region manager for the Dallas office of Heller... agencies determine,' says Blumberg. Hoopes adds credit tenant transactions to the preferred list. "It's similar to buying a bond if you have an investment-grade tenant and a long-term...

...he says. "We can't envision deals being underwritten, negotiated and consummated solely through the Internet "

Kahlsen adds, "We don't have a Web site. Our concern is that we'll lose control by offering terms over the Internet. We want face-to-face contact. It remains to be seen what may evolve in...oriented," he says.

Hoopes agrees with the others, explaining that while his firm uses the Internet daily in accessing borrower and lender Web sites, "we're not at the next level...

...relationships can't be replaced by technology"

Ballent says Heller is starting to use the Internet as another production source. "Technology has made us more productive," he says. "It's easier now to send applications, loan documents and Argus (computer model] files for real estate valuation."

Blumberg says the Reilly Group has an active Web site, but no online applications. "We prefer the personal approach," she says. "Real estate is something you can touch; it's not (a] formula on a piece of paper...
...to enhance the service we provide, not replace it. We're in discussions with several Internet sites regarding participation and are still trying to understand the impact on our customers. We...

...not mailing addresses, and the business is not homogeneous [enough] yet to be effective on Internet borrowing."

Deering says ARCS is set up to take loan applications and process them on the Internet, but so far has dealt only with smaller clients. "The larger ones feel they have the knowledge and the market connections," he says.

Raftery says that Lafayette uses the Internet for research and information, as more of a resource than a production tool. He concedes...

...is in its infancy, but it has put us on the cutting edge of the
Internet," he says.

Bober sees lenders committing to the Internet as a growing trend.
"Two years ago, borrowers were dialing for dollars. Now they re...

...but the loan itself is still done on a personal basis, says Bober.
Knudsen believes Internet technology will drive a major technological
advance in the coming decade. "If you look at the various real
estate-related Internet applications in place today versus just three
or four years ago, and extrapolate it out...

...The industry needs to embrace this technology, and mortgage bankers will
need to determine an Internet-based strategy that will leverage their
resources and use it as a tool versus ignoring...

7/3,K/5   (Item 5 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01982595 49237626
The challenges of appraising residential Alzheimer's assisted living
facilities
Sonneman, Donald
Appraisal Journal v68n1 PP: 97-108 Jan 2000
ISSN: 0003-7087 JRNL CODE: APJ
WORD COUNT: 6396

...ABSTRACT: Some of the trends that influence assisted living generally
are reviewed, and how RAALFs are similar to and different from
typical assisted living facilities is discussed. Specific appraisal
procedures that treat...
...TEXT: article reviews some of the trends that influence assisted living
generally, discusses how RAALFs are similar to and different from
typical assisted living facilities, and covers specific appraisal
procedures that treat...

...population served, size of competitive market area, revenue per
resident, resident turnover, operating expenses for similar line item
categories, absorption characteristics, and degree of risk. The properly
informed appraiser will fully...

...older increased from $55,178 to $77,700.4 Poverty indicators reflect
change in a similar direction. The percentage of people in the 65 and
older age group who were below...expenses

The ideal scenario for structuring an income approach is having expense data from other similar RAALF facilities. However, line item expense estimates may be difficult to obtain for RAALFs. Therefore...

...specialized knowledge of both categories of facilities.

TABLE 1
Many expense items for RAALFs are similar to other assisted living facilities. However, wages and payroll expenses are substantially higher because of...nursing facilities seek out clients among the Alzheimer's and dementia population. The most directly comparable facilities fall into the following categories: standalone RAALFs, assisted living facilities with special wings for...

...residents. Small residential care facilities, which typically have four to eight beds, are not considered comparable because they usually have very limited staffing (one caregiver, for example) and lower rent levels...

...Comparison Approach

As with assisted living facilities, it is essential to find comparables with a similar percentage of private pay census. Typically an appraiser seeks 90%-100% private pay census. In...areas from a seven- to 10-mile radius to a three- to seven-mile radius. similarly, RAALFs are being developed more frequently, and the target market radius will gradually shrink in...

...the method for estimating the demand for RAALFs was essential." Two basic methods that involve similar multipliers are in use. Demand is estimated by starting with a target age group within...

...Few of the market participants interviewed were aware of the murky nature of these multipliers. similar comments apply to the second method. In spite of their limitations and the age of...follows:

Going-concern value

Value of intangibles (each component separately estimated)

Value of personal property

Real estate value (as a residual)

This method is consistent with business valuation principles

and highly consistent with the method used by some appraisers when they segregate values for hotel appraisals.38

3. Method 3...

...real estate value is then calculated as a residual as follows:
Going-concern value including real estate

Business value (personal property and intangibles combined)

Real estate value (as a residual)

This method typically requires a business valuation professional to execute. The first decision required is the selection of one of several methods...

...have a better understanding of the trends that influence assisted living generally, how RAALFs are similar and how they are different from typical assisted living facilities, and how these similarities and...Senior Care Acquisition Report, 3d ed. Prepared by Irving Levin Associates, New Canaan, Connecticut, 1998. Internet Resources

Altschuler, Claire, I. "Dementia Patients Get a Boost from Designs That Understand the 'Home...

7/3,K/6   (Item 6 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01912439 05-63431
CompuCredit aspires for a unique niche
Anonymous
Credit Card Management v12n7 PP: 14-16 Oct 1999
ISSN: 0896-9329 JRNL CODE: CCM
WORD COUNT: 548

...DESCRIPTORS: Internet;

...ABSTRACT: the Aspire.Visa card. Another area where CompuCredit thinks it can shine is on the internet.
...TEXT: nonprime, frequently young market. Its main product is the Aspire Visa card, issued on the Internet at AspireCard.com, and also offered to holders of accounts CompuCredit buys from other issuers...

...and annual percentage rates were assigned randomly, and the responses

were studied by a neural network-based optimization product from
software and consulting firm Trajecta Inc., Austin, Texas. The test of the
pricing model came when CompuCredit purchased a second
portfolio with similar characteristics. House credits the
optimizing software with allowing CompuCredit to determine that higher
interest rates could be...

...each customer's profile."

Another area where CompuCredit thinks it can shine is on the Internet
, which House says "is populated by prime and superprime issuers who are
declining 80% of applicants." NextCard Inc., for instance, the
Internet-only Visa issuer that went public earlier this year,
reported in its prospectus that out...

...only 65,000. NextCard says its approval rate is much higher now.

CompuCredit first tested Internet marketing on another Web site, that
of LendingTree Inc., a loan marketplace. House won't...

7/3,K/7   (Item 7 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01846088 04-97079
Third party originators and mortgage prepayment risk: An agency problem?
LaCour-Little, Michael; Chun, Gregory H
Journal of Real Estate Research v17n1/2 PP: 55-70 1999
ISSN: 0896-5803 JRNL CODE: JRR
WORD COUNT: 5442

...ABSTRACT: to encourage borrowers to refinance and, accordingly, their
actions may affect asset values. The principal-agent problem is
sketched and two sets of data are examined. Results support the argument:
loans...
...TEXT: borrowers to refinance and, accordingly, their actions may affect
asset values. We sketch the principal-agent problem and examine two
sets of data. Results support the argument: loans originated by third...

...mortgage lender and third party originator may be cast in terms of the
classic principal-agent problem. Since prepayment risk is not shared
between lender and originator, TPOs can "churn" the...

...retail branches and loan production offices, corporate relationships,
referrals from real estate brokers, telephone and internet-based

sales units, as well as third party originators, such as mortgage brokers and loan...

...loans or loan servicing rights trade among lenders and investment bankers post-origination.

The mortgage broker receives his or her compensation from the borrower in terms of origination fees and points...typically include non-solicitation clauses;4 the lender does not want the correspondent or the broker to encourage borrowers to refinance when rates fall or it is otherwise advantageous5 for the borrower to do so. Yet the broker and correspondent earn their living by transaction volume and, like other brokers, have an economic...

...be exercised when interest rates fall; default options are more likely to be exercised when house prices fall.'o Hendershott and Van Order (1987) provide a survey of representative pricing model results. Kau, Keenan, Mueller and Epperson (1992) develop a formal treatment of the valuation problem...

...and the subsequent loan purchaser may be viewed in the context of the classic principal-agent problem.'2 For a review of this literature, see Hart and Holmstrom (1987) and Mas...

...payments. The duration of loan payments depends, in part, on the hidden actions of the agent, who may encourage the customer to refinance or not, as well as states of nature...

...of interest rates), and the personal situation of the borrower. These hidden actions of the agent are unobservable by the principal, the loan purchaser, who only observes whether the loan prepays and cannot determine whether the agent has induced or encouraged the borrower's behavior.'3 If the agent's behavior were observable, the sole issue is how the principal and agent are to share the ...The optimal contract will specify a certain payment contingent on a specified level of the agent's effort,'4 and this level of effort will be guaranteed as long as the contract is in force. The risk preferences of the principal and the agent will determine how to share other risks associated with states of nature and borrower characteristics. For example, in the case of the risk neutral principal and the risk adverse agent, a fixed fee structure paid by the principal to the agent would represent the optimal contract.'5 As a result, the agent will be fully insured against any unsystematic risk. On the other hand, if the agent is risk neutral, a contingent contract based on the outcome will be optimal, and consequently the agent will absorb all the unsystematic risk.

The optimal contract when the agent's actions are unobservable involves a riskincentive tradeoff. In other words, there exists a tradeoff ...

...from the provision of extra incentives and losses from inefficient risk sharing. Suppose that the agent is risk averse and is paid a fixed amount that is independent of outcome. (This...

...of future loan performance.) Knowing that there is no reward for extra costly effort, the agent will exert no effort. Therefore, the principal has to offer the agent more compensation that depends upon observable outcome. As a result, the agent gains from the extra incentives but shares part of the risk. In the mortgage case...

...not the contractual arrangements currently in place. Accordingly, with no incentives to discourage refinancing, the agent chooses to encourage it. Given these adverse incentives, we expect to observe higher rates of...

...we include the variable THIRDPTY, an indicator variable set equal to one, if a mortgage broker or other third party originated the loan, and zero otherwise.

Data

Two sets of data...times more sensitive to refinancing incentives compared to retail loans.

Market level data tell a similar story, though differences are less dramatic. In Exhibit 12, TPO loans exhibit consistently higher average... promote a switch in mortgage products even when rates are relatively stable. For example, a broker might encourage a thirty-year FRM borrower to switch to the newly available hybrid 5...

...of this research at SolomonSmithBarney's mortgage research department, January 6, 1998. 12 The principal-agent problem is most often formulated as that of a owner employing a manager whose unobservable...

...profitability. The question then is what is the optimal contract between the principal and the agent.

13 It is this difficulty in establishing the connection between the agent's behavior and the borrower's actions that makes monitoring so difficult. By way of contrast, consider the simplicity of recourse provisions against the agent in the event of default: if the borrower is late in making

Footnote:

payments for...

...demands that the loan originator repurchase the loan.

'4 We define effort as follows: the agent encourages the borrower to
stay with the current lender or at least does not interfere...

...Green prove this point in Proposition 14.B.1. The optimal contract
specifies that the agent chooses the action e* that maximizes
[firf(ie)dir - v-' (u + g(e))] and the principal pays the agent a
fixed amount.

Footnote:

16 Broadly, one may study the duration of time until an...Kau, J. B. and T.
Kim, The Timing of Prepayment: A Theoretical Analysis, Journal of
Real Estate Finance and Economics, 1992, 7:3, 221-28.

Kau, J. B., D. Keenan, W. Mueller and J. Epperson, A Generalized
Valuation Model for FixedRate Residential Mortgages, Journal of
Money, Credit, and Banking, 1992, 24:3, 279-99...

...TEXT: Theory of Fuzzy Sets and specifically fuzzy logic is highly
appropriate to the tasks of real estate valuation and
decision making. Fuzzy logic provides the means by which judgments that
characterize our method of reasoning can be formalized without
resorting to an artificial process of making these judgments...
geometrically represented in the form shown in Exhibit 6. Kosko (1993:194)
refers to a similar geometric representation of the rules represented
by rectangles, explaining,

I designed the rule as a...because buyers consider a number of different attributes simultaneously. They do not look at several comparable properties and make price additions and subtractions to each comparable for ways in which it differs from the subject property. An important technical assumption in...

...the principal characteristics of a property that cause it to vary in value from other, similar properties. For an income-producing property, Ratcliff suggests the following six characteristics, although he recognizes...

...to the attributes to reflect their relative importance in causing variances in values. Then, each comparable and the subject property is rated to reflect its relative desirability according to a predetermined

...

...by the weight assigned to that characteristic, and the weighted ratings are summed for each comparable property and the subject property to find a synthetic degree of desirability. These features, their weights, the ratings, the synthetic degree of desirability for each comparable property and the subject property, and the selling prices of the comparable properties are shown in Exhibit 8.7

In this approach, the judgment of the analyst...in the traditional multi-attribute valuation model, by means of the weighted rating operation. Using comparable A as an example, we hypothesize that this operation using triangular fuzzy numbers produces the...

...original values +/- 1 for the attributes and +/- 5 for the weights. The results for the comparable properties could be represented geometrically as shown in Exhibit 18:

Additionally, fuzzy logic supports the...

...interpret the causal relationships among the degrees of desirability and the selling prices of the comparable properties as fuzzy rules for pricing the subject property. In other words, instead of finding...

...a generic property investment and its market price, we can interpret the relationships characterizing the comparable properties as five fuzzy rules of the type (see Exhibit 19):10

(Table Omitted)

Captioned...are always equal to the fuzzy sets that represent the degree of desirability of the comparable properties and, therefore, to m sub A1

,(x), m sub A2 (x),13 etc., it...
...not produce Ratcliff's "probable price," since the mathematical
processes differ. The result should be similar, but more information
is provided in terms of several "possible" prices having different degrees
of...to reflect deflation in the value of the dollar by multiplying the
price of each comparable by five.

Footnote:

8 Geometrically a fuzzy rule assumes a rectangular form, or more correctly
...

...through the observation of input-output pairs is usually accomplished
through the use of neural network techniques. The results are "Neuro
Fuzzy" systems that possess the capability to learn and adapt...

 7/3,K/9   (Item 9 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

01685126 03-36116
Wholesale giants '97
LaMalfa, Tom
Mortgage Banking v58n11 PP: 46-65 Aug 1998
ISSN: 0730-0212 JRNL CODE: MOB
WORD COUNT: 13237

...TEXT: retail is the smaller slice. Chart C looks at the market divided
into three pieces-broker, correspondent (less brokers) and retail.
Consisting only of its core constituents-- financial intermediaries, namely
banks...

...are not included in the tallies for the correspondent channel.

There are two types of broker wholesale-table-funded and
concurrent-funded. Both rely on funding from a second source; in...

...requires a warehouse line of credit. Generally, concurrent-funding is
the table-funding of a broker who prepares the closing package and
closes the loan in his or her name.
By...

...the presence of a credit line and the absence of a servicing portfolio.
Whereas all broker business is based on optional or best efforts
delivery, correspondent consists of these transactions along...

fastest-growing company. Seventh-ranked Washington Mutual Bank, Seattle,
purchased $10.9 billion, exclusively through broker originators.
Washington Mutual was not listed in the top 10 in '96, and is the...

...business and $3.8 billion of closed loans.

Channel dominators

Three firms dominate in the broker channel, five in the correspondent
channel and one in retail. The broker all-stars are Countrywide,
InterFirst and Washington Mutual. Each did between $11 billion and $13...

...lawsuits under RESPA [Real Estate Settlement Procedures Act]. That was
front-page news in most broker communities all year long. As you
know, FlagStar was involved in several RESPA lawsuits.

Q...
...to $50 million a month. Since they have warehouse lines, they're exempt
from some broker disclosure requirements. Today, 46 percent of our
volume is correspondent production. The growth has been...us it is pleased
with the results so far. We're working on risk-based pricing.
FlagStar securitizes its loans and communicates with investors through a
display model. We've been doing this in-house, but in '98 we're
moving it to the street and using our AU system platform. To do risk-based
pricing right, point-of-sale approval is needed. To determine that
one person is a better...

...between brokers, correspondents and wholesalers. Everything will be
electronic, either through scanning or interfaces. The broker will
eventually become custodian of all the paper documents. These work flow
changes, supported by...

...manage around preset levels of closings, underwriting and locks.

Q: Is FlagStar using the new broker disclosure?

A: No, and we don't intend to, unless it's mandated by new...

...Our largest production channel is correspondent; however, HomeSide
experienced a 70 percent increase in its broker volume in 1997. And
we want to continue to grow wholesale. Our acquisition of Loan America will
double the size of the broker operation overnight. We should go from
a top 25 to a top 15 wholesaler with...descriptions. They can register
loans, lock rates and get updates. That's all on the Internet. We're
also taking loan applications over the Internet. Our goal is to
develop true point-of-sale capability over the Internet for our

customers.

Q: Did the profit picture improve last year?

A: If it did...

...development was technology, in particular automated underwriting and its internal utilization. On the retail side, Internet lending is starting to appear using automated underwriting at the point of sale. InterFirst is...to go to all the different people and places. InterFirst said, "Do you realize the broker is taking on the wholesaler's overhead?" And they said, "We can't manage overhead...

...percent. Our goal is to get automated underwriting to the point of sale-to the broker and ultimately to the consumer. Unfortunately, the Year 2000 computer problem is affecting the big...

...Trust the engine understand the logic, and integrate it all.

Q: Do you see the Internet becoming an important channel?

A: I see more promise than I did last year. The Internet will become a consumer channel over the next three years. Both Quicken and Microsoft are beginning to do interesting things on the Internet. With portfolio retention a big issue, the Internet could be a nice tool for large servicers. Otherwise, the Web is still primarily a...

...well in '97. The traditional, functionally integrated mortgage banker is more and more becoming a broker. That's where we're finding new pockets of production.

Q: Talk has it that...heard InterFirst was one of the companies that took the lead in introducing the new broker disclosure.

A: We did, and it's going well. InterFirst has been able to convey... hedging pays off; '98 will tell the story.
Q: Is Fleet using the MBA/NAMB broker disclosure?

A: Fleet's using a disclosure similar to the one developed by NAMB and MBA. What's most important is that everyone...

...this year?

A: The answer depends on the lender and their pricing strategy. In the broker channel, we price short-term commitments ...by investors. Second, there's more awareness about the companies wholesalers do business

with. Frequent broker revalidations are needed, for instance.
Investors are saying "no" to brokers who show themselves to...

...is really understanding the economic drivers of the business.

Q: How is RESPA affecting your broker operation?

A: Norwest has always redisclosed the Truth in Lending and Good Faith
Estimate directly...

...in our pricing policies, and that makes us even more comfortable with
RESPA. Third, our broker disclosure now requires borrowers to
acknowledge that they understand how compensation works in their
transaction...rolled out an automated underwriting system for retail,
DecisionWise. It will be installed in the broker and the
correspondent channels next. All of our customers receive and lock rates
electronically.

Q...

...outlook for the wholesale business?

A: The future is very bright for the correspondent and broker
businesses. The markets are growing, and originators continue to be
incented to sell servicing. As...

...increase.

Q: What's Chase's plan for automated underwriting systems in the
correspondent and broker channels?

A: We've taken PMI's DecisionWise system and enhanced it to fit our...

...products, both fixed and adjustable rate. Our plan is to bring that
platform into the broker and correspondent channels. The longer-term
goal is to have our customers transmit all loans...

...Last year, Chase originated about $750 million in subprime loans. The
majority came through the broker channel. We're now growing the
retail side of that business. It's very profitable...reps help them with
recruiting and industry education, for example. If the wholesaler tells the
broker or correspondent that they need to use a different mortgage
insurer, that originator has got...A: We still are improving the Web
technology. We're taking lock-ins through the Internet. Our software
installation for '98 will have a couple of communications devices through
our Web site. RBMG's customers will be hooked up more directly through the

Internet. Security continues to be my main concern with any Web site.

Q: One of the...

...A: There's been a move on the part of wholesalers to start requiring a broker disclosure. The broker disclosure being used is the Mortgage Bankers Association's recommended format, not HUD's. The...

...class-action certifications. Despite having co-developed the disclosure form, the National Association of Mortgage Broker's membership hasn't always wanted to use it. There's still resistance to the...What's the outlook for the wholesale side of WM's business?

A: If the broker business continues to grow and expand, and I think it will because of consolidation and...

...Finance, this places us fourth largest in originations, including No. 2 rankings in retail and broker originations. However, the measurement we use is how much ARM volume we produce. We had...

...Yes, it's piloting right now. It'll be important for people who surf the Internet for the lowest price. Eventually, we'll use the Web site as an educational tool and to generate leads.

Q: Do you envision a substantial volume of Internet originations in the next couple years?

A: WM's strength is sitting down with folks...business with 25 to 30 percent of the brokers out there. We have a Premier Broker program in which the brokers go through a significant due-diligence process. A lot of

...

...a standardized platform. The large servicers are putting a lot of effort into developing the Internet, automated underwriting, back-office automation and data warehousing to accomplish the strategy. A third trend

...

...costs. That's what we're working on.

Q: What's the status of a broker channel?

A: Principal is acquiring ReliaStar Mortgage from ReliaStar Financial. The acquisition fills an important strategic objective by giving us a well-established broker distribution system. ReliaStar Mortgage has been in the wholesale business for lo years and maintainsThe mortgage industry is very mature. But its strength is its distribution network . In hindsight, it probably wasn't the best business practice, selling one

or two products...

...extra spread, banking a portion of their pipeline and brokering a
portion. A new hybrid broker-banker has appeared.

Q: How is Countrywide using technology in the corre spondent channel?
A...

 7/3,K/10   (Item 10 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)
(c) 2006 ProQuest Info&Learning. All rts. reserv.

...TEXT: as reasonable. These methods include the discounted cash flow
method, the replacement cost method, the comparable companies method,
and the inheritance tax valuation method. Japan's tax authorities may take
the...

...and land value tax purposes. This Circular may be useful, particularly
where supporting a lower valuation, since this method does not
necessarily include value for goodwill.

Acquisition of real property

When the Target's assets include real property, the Acquirer
must take into account additional taxes that apply to the transfer of real
...ratio may be increased if it can be demonstrated to the Japanese tax
authorities that comparable entities in Japan maintain debt-toequity
ratios that are higher than three-to-one. The...deductible for tax
purposes.

For corporations, capital gains and ordinary income are taxed in a
similar manner.

For corporations, unused operating losses are limited to a one-year carry
back under...other relevant laws must be considered in tax planning.

Japan has an extensive tax treaty network.

The Japanese tax authorities exercise broad discretion in the conduct of
tax audits. It is...

7/3,K/11   (Item 11 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01514497 01-65485
The killer app in your library: Archives as a Web revenue engine
Tuccillo, Fred; Skinner, Mary Ann
Editor & Publisher mediainfo.com Supplement PP: 12-14+ Sep 1997
ISSN: 0013-094X JRNL CODE: EDP

...ABSTRACT: formula for commercial success, newspaper Web site managers
should pay close attention to the killer Internet application in
their own libraries - electronic story archives. The fundamental value of
newspapers' archives is...

...what has been learned in that venture may be useful for other Web
managers contemplating similar projects. The first decision in
planning an Internet-based archive system is whether to invent and
build the system in-house or outsource the project to turnkey
professionals. Pricing is the next issue. Newsday launched its site
with an introductory pricing model called the $5 Day Pass.
This enabled users to download an unlimited number of stories...

7/3,K/12   (Item 12 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01115289 97-64683
Artificial intelligence: The future of appraising
Rayburn, William B; Tosh, Dennis S
Appraisal Journal v63n4 PP: 429-435 Oct 1995
ISSN: 0003-7087 JRNL CODE: APJ
WORD COUNT: 4271

...TEXT: conducive to automation. Automation packages are either available
or are under development that will pull comparable sales from a
database, pull listings from a database, post the best sales to the...

...amenities" as of a certain date on the subject. The bundle is estimated
by using similar bundles from similar sales.

In addition, an appraiser is able in most instances to recognize changes in the...

...of data, it does not know what happened 12 years ago in this market under similar conditions.

A short note on EDI
Electronic commerce (EC) is simply a paperless way of...000. If the structure of the market were not a straight line or something very similar, the model would misprice (or misvalue) the property significantly. Artificial intelligence models are designed to...

...inferior solution. In particular, these back propagation-based learning algorithms have a tendency for the network:

* To become trapped in local optima (this is like finding a "first is best" approximation but not being able to improve on it).

* To suffer from network paralysis as the weights move to higher values (for certain variables, it can only improve...by neighborhoods.

In the field of artificial neural systems, intuition is defined as a neural network with appropriate weights connecting its nodes capable of producing the proper response to a given...

...is applicable, even when the input stimuli are noisy or incomplete or when the best method for finding a solution is unknown. Residential real estate pricing and valuation appear ideally suited to ANN. Real estate markets present noisy data (i.e., two houses near each other in a neighborhood with $200,000 homes, and similar in almost every way, sell for a $10,000 difference, or 7.5%, in price). Similarly, there may be only a few transactions in the neighborhood. An ANN system is aware...

...is able to take them into consideration.

The weights connecting the nodes in the neural network are adjusted based on experience or repeated exposure to a problem. The objective of neural network design is to simulate the process of adaptive biological learning, albeit on a much less...

...as an interaction rule. These nodes are arranged in multiple, fully interconnected layers, producing a network topology.

IMPACTS ON THE PROFESSION

The appraisal profession will change as a result of advances...

...another step toward faster turn times. An appraisal request may be sent electronically on the Internet or a proprietary network. The request may be for a traditional appraisal on the URAR form or on another ...

...fast turn time. Until appraisers can provide better (i.e., higher quality) answers at a comparable cost, lenders will continue to use tax assessments, provided they can manage their losses at...of production per unit is very low, however; in fact, the lowest in the industry. Similarly, technology will allow appraisers to offer an array of standardized products and participate in high...

...time delay. Collateral value is presumed to be constant and no new appraisal is ordered. Similarly, how good (i.e., valid) the initial appraisal or evaluation on the property was is...

7/3,K/13   (Item 13 from file: 15)
DIALOG(R)File 15:ABI/Inform(R)

01067191 97-16585
Industry leaders debate how-tos of standardizing real estate
Johnson, Ben
National Real Estate Investor v37n7 PP: 79-83 Jul 1995
ISSN: 0027-9994 JRNL CODE: NRE
WORD COUNT: 2354

...TEXT: a great deal of difficulty revolves around the lack of information, the ability to have comparable data and technology.

Where do we see Wall Street today in terms of real estate...

...lot of work in terms of mortgage quality ratings, and we actually had developed some pricing models. But you talk to a real estate person who's a deal maker, and the concept of pricing mortgages individually based upon lease information input from a model, not a final decision maker, is still relatively foreign to them.

Henry: And don't...a trading desk solve some of those problems? Is there going to be a national network of trading of commercial real estate? Mitch Schoch: I think that a national network is not a solution; it's a conduit upon which a solution can occur. I...

...TEXT: are traded on organized exchanges; an individual can purchase them
with a call to a broker. As with the purchase of shares of stock on
an exchange, the end-user need...

...of the Bretton Woods system in 1973 and increased further in the
1980's.(36) Similarly, interest rate volatility has reached
unprecedented levels, higher than even the period just before 1929...

...interest rates; in such a case, the contract is called an interest rate
swap.(44) Similar exchanges may protect against movements in exchange
rates, commodity prices, or stock prices.

2. VALUATION...intellectual concepts like $E=mc^2$ are not patentable.(
152) Thus, an improved option pricing model or a new strategy
for hedging market risks might not be patentable subject matter.(153)
However, a derivative house might achieve the functional equivalent
with a patent for a computer system embodying such a...given a set of
accounted-for variables with no "surprises," produces a poor
valuation.(193)

Similarly, one mathematician-turned-trader recently noted: "As
various possible outcomes become less and more likely...

...extensive publicity about some notable crime greatly enhances lay
assessment of the probability of a similar event.(200) Conversely,
difficulty in recalling instances may decrease the estimated
probability.(201)

The British...Viewed narrowly, an agency relationship involves one or more
persons (the principal) engaging another (the agent) to exercise
decisionmaking authority on their behalf. The problem is that agents often
have incentives...

...whether principal-agency conflicts contribute to banker informational failures requires us to focus on the agent's incentives to acquire (and distribute) risk information and on the principal's ability to...

...in derivatives operations may emphasize rewards and downplay risks. Speaking somewhat loosely, the more an agent can suppress the apparent risk undertaken without arousing the principal's suspicions, the better the agent will look.(214) Thus, agents would have incentives to forego investing a shareholder-optimal amount...switched to the newer, "zero coupon" method had an advantage of many basis points.(248) Similarly, the market for perpetual ...effects throughout the market.(268) Moreover, since even industrial corporations can be part of this network, their failures could be matters of international concern.

Government, rather than the private sector, has...

...to technocratic risk management decisions.(270) First, "hazard identification": regulators must determine whether a risk agent can cause harm under plausible circumstances. There is little attempt at quantification. Second, "risk assessment": estimating the severity and likelihood of harm from exposure to a risk agent. Both of these steps could be applied to the regulation of financial derivatives. Currently, it...Moreover, these partial schematics of networks would be useful in the event of a crisis similar to the failure of the Bank of New England. In the case of synthetic hedging...confidential information be adequately protected, both from disclosure under the Freedom of Information Act and similar laws and from losses of intellectual property.(288)

C. ENHANCEMENT OF THE ROLE OF EXISTING...

...financial institutions measure the true performance of their rocket scientists.

Regulators are in a position similar to that of senior managers. If appropriate steps can be taken to ensure confidentiality and...

...the legal specialist would benefit from the knowledge that specialist had gained from working on similar legal questions for other banks. Over time, the identity of the first mover will alternate...Fourth Quarter of 1991 at 15-16 (May 1992) (unpublished manuscript, on file with author). Similarly, one April 1992 survey found that turnover in the OTC "currency options" market grew from...Y. TIMES. Dec. 18, 1992. at C1.

16. Some of the activities engaged in by broker-dealer holding

companies and affiliates have hitherto been unregulated or loosely
regulated. This is beginning...

...ADDITIONAL FINANCIAL ACTIVITIES 2-8 (1992) (calling for study of whether
unregulated financial activities of broker-dealer holding companies
and affiliates warrant additional regulation). The Securities and Exchange
Commission (SEC) has...

...Exchange Act of 1934 intended to provide the SEC with information about
the affiliates of broker-dealers, including their derivatives
activities. Final Temporary Risk Assessment Rules, 57 Fed. Reg. 32,159...
reasons for the reduced effectiveness of delta hedging in chaotic markets
are, in some ways, similar to the reasons for the shortcomings of
portfolio insurance during the stock market crash of...S.C. Secs 284-85
(1992).

212. See, e.g., Joseph E. Stiglitz, Principal and Agent, in THE NEW
PALGRAVE: A DICTIONARY OF MONEY AND FINANCE 185 (1992).

213. Such constraints...

...at D12; see also supra note 100 and accompanying text. The moral hazard
here is similar to that faced by corporations when they are rapidly
approaching insolvency; because they have little...Based Capital Standards,
supra note 11.

276. Id. The Office of Thrift Supervision has made similar proposals
for savings and loan associations. Regulatory Capital: Interest Rate Risk
Component, 57 Fed. Reg...

...Geer, High Risk Life, FORBES, June 22, 1992.

299. P. S. Johnson has argued on similar grounds that applied
research and development is unsuited to industrial research and development
consortia. JOHNSON...

WORD COUNT: 2715

A neural network approach to residential property appraisal

...ABSTRACT: nonlinear maps between high-dimensional input pattern spaces and outputs. The superiority of the neural network approach to residential property appraisal based on single-family housing market transactions from a large...
...TEXT: and Newsome and Zietz (1992) for a discussion of some of these issues).

Recently, neural network models inspired by the neural architecture of the brain have been developed and successfully applied...

...or inexact predetermination of the appraisal model's functional form are eliminated because the neural network itself determines a functional form and tunes its estimation parameters based on the criterion of...

...and Shadmehr and D'Argenio (1990)).

Accordingly, this paper investigates the feasibility of a neural network approach to residential property appraisal based on single-family housing market transactions from a large city. Our purpose is to demonstrate the superiority of a neural network over a multiple regression model in estimating values of residential properties.(1) Additionally, we perform an ancillary analysis of adjusting comparable property sale prices using the sales comparison approach to offer further support for, and insights into, the neural network appraisal process.
The remainder of our paper is organized into three sections. The next section...

...findings are offered in the last section.

METHODOLOGY

From current empirical studies, the following traditional valuation model for single family properties is adopted

SP sub i =f(S sub ij)

where SP, is the selling price of house i as recorded at closing, and S sub ij is the standard set of explanatory...

...of bathrooms, bedrooms, fireplaces, garages, stones, and lot size of the properties.

PROCEDURES

The neural network used to estimate the selling price of the sample properties is illustrated in Exhibit 1...
...with its associated weight, by a line terminated by an arrow.

We use a neural network model that consists of an input layer of 8 nodes, each of which represents an...

...of 1 node, which represents the estimated value of the property. Signals in the neural network feed-forward from left to right. The feed-forward process entails performing two operations per...

...Presenting each property's characteristics and actual selling price over and over again to the network causes the network to adapt its weights so that the estimated price of the property mirrors its actual...

...by an error term. The term represents the difference between the price estimated by the network and the property's actual value, summed over all patterns. The goal of training is to minimize the error over all patterns.

RESULTS

The appraisal neural network is implemented on an IBM-compatible 486 PC, using the software described in Eberhart and Dobbins (1990).(2) We train the appraisal neural network by presenting it with observations on 58 residential properties sold during the first quarter of...

...estimation of the selling price of the 105 properties by the competing models, the neural network results in a mean percentage error and a mean absolute percentage error of--1.31...

...and order-by-size basis, Exhibits 2 and 3 illustrate the results of the neural network and regression models. (Exhibits 2 and 3 omitted)

In Exhibit 2, the dashed line represents...

...105 residential properties. Correspondingly, the solid line represents the absolute percentage errors of the neural network for these properties. Thus the difference between the dashed and solid line could be interpreted as representing the net accuracy gain on a property-by-property "basis of the neural network over the multiple regression model.

In Exhibit 3, the solid and dotted lines portray the absolute percentage

errors, ordered by magnitude, of the neural network and regression model, respectively. This shows, for example, that about 20 percent of the regression...

...have absolute errors of less than 5 percent, while over 40 percent of the neural network estimates have absolute errors of less than 5 percent. Further, while the highest error in the estimate of the neural network is 19 percent, slightly over 10 percent of the regression estimates contain errors of 20 percent or more.

SALES COMPARISON OF COMPARABLES

Because a neural network overcomes the methodological problems of multiple regression, it is not surprising that it can derive...

...A certain degree of skepticism about these estimates may exist, however, because of the neural network's newness and its "black box" nature. In an attempt to add credibility to a neural network appraisal technique,(3) the following steps describe a market sales comparison analysis performed on comparables...

...these appraisals.

1. A subject property to be valued is first identified.

2. Information on comparable properties is gathered. Selection of comparables entails matching sample properties to the subject property on
...

...number of comparables are further reduced to include only those properties for which the neural network appraisals are within 5 percent of their actual selling price. This latter qualification is necessary...

...value in the market sales comparison adjustment calculation is the actual selling price of the comparable property. Then each difference in square footage, lot size, and age between the comparable and subject property is valued individually by the neural network. Finally, by adding the net adjustments for attribute differences to the comparable's selling price, we produce a detailed estimate of what the comparable property would have sold for had its features been the same as the subject property...

...the value of the subject property is estimated to be $168,666 by the neural network. Following Steps 1 through 3 of the above procedure, we arrive at five comparable sample properties that sold prior to the subject property. The adjustments to each of these comparable

residential properties are shown in Table 2. (Table 2 omitted)
The sales comparison analysis of the above comparables results in an individually-adjusted range of $167,041 (Comparable 4) to $172,705 (Comparable 3). The narrow range of these adjusted prices appears to confirm both the neural network's initial estimate of $168,666 (and the actual selling price of $170,000) for the subject property.(5) Moreover, if the sum of the absolute adjustments of a comparable is used as a surrogate for its similarity to the subject property. Comparable 5 adjusted price of $168,681 also corroborates the neural network's initial estimate.

SUMMARY

This paper uses market transactions to provide evidence that a neural network's estimates of residential property values are nearly twice as accurate as those of a multiple regression model. More specifically, in estimating values the neural network results in a mean error of--1.31 percent and a mean absolute error of...

...model. Further, these findings are supported and validated by a process of using the neural network to adjust comparable properties to a subject property according to the market sales comparison approach. In light of...
...of the multiple regression technique and the comparative goodness of the results of the neural network, we are extremely optimistic about the promise a neural network approach holds, not only for the appraisal of single-family dwellings, but also as a...

...its comparative advantage in precision over traditional statistical methods, the ultimate benefits of a neural network can only be fully realized when its results are used to augment ...and seasoned judgment of an appraiser.

FOOTNOTES

1. Regardless of whether one used a neural network approach or conventional statistical methods. it is essential to realize that they are merely tools...

...a property's value an quantified precisely.

2. Although from a theoretical perspective a neural network is seemingly complex, from a practical standpoint the technique is relatively straight forward and easily...
...We believe appraisers, after receiving a modest amount of instruction on the usage of neural network software, such as the package referenced

here, could accomplish a neural network analysis similar to the
one illustrated in the paper for their subset of residential properties.

3. This... .

...In a comparative appraisal of single-family houses, Dilmore (1974)
concludes that the selection of comparable sales by matching property
attributes using the entire community sample gives better accuracy than
selecting...

...the subject property.

5. Analyses performed on additional subject properties (not shown her),
resulted in similar degrees of confirmation to the initial estimates
of the value generated by the neural network.

REFERENCES

R.E. Cannady, "How Should You Estimate and Provide Market Support for
Adjustments?" The...
...August 1974, pp. 167-179.

R.C. Eberhart and R.W. Dobbins, "Implementation," In Neural Network
PC Tools, edited by R.C. Eberhart and R.W. Dobbins (San Diego, CA: Academic
...

...Analysis," The Appraisal Journal, October 1989, pp. 49517.

B.A. Newsome and J. Zietz, "Adjusting Comparable Sales Using Multiple
Regression Analysis--The Need for Segmentation," The Appraisal Journal,
January 1992, pp...

...pp. 137-152.

R. Shadmehr and D.Z. D'Argenio, "A Comparison of a Neural Network
Based Estimator and Two Statistical Estimators in a Sparse and Noisy
Environment," International Joint Conference...

00645111 92-60051
Quality Management Systems: Alternative Approaches to Integrating Quality
Factors in Purchasing and Material Management Decision Making

Perkins, Charles A.; Perry, James H., Jr.
Production & Inventory Management Journal v33n3 PP: 58-62 Third Quarter
1992
ISSN: 0897-8336 JRNL CODE: PIM
WORD COUNT: 3218

...TEXT: in the quality organization. It quickly developed and gained top
management support for a bid evaluation method to be applied to
selected highly competitive items. The system was one based upon an
expanded evaluation of vendors' in-house quality systems. Based
on the score received during the in-plant evaluation done by RABBIT's
quality personnel, a bid evaluation criteria was established to
adjust bid prices to reflect the results. Firms understood the criteria...

...with the commitment to make the information available on a real-time
computer work station network with common applications to quality,
production, and purchasing. The purchasing agent would have both the
past purchase history and quality information displayed. The goal of the...
readily available and coded into the purchase data file maintained on a
small personal computer network. Use of nonconforming material in the
manufacturing process would result in a rejected end product...of an
integrating data base system. Without complete, timely, and accurate
performance information, the purchasing agent must appropriately rely
on personal knowledge of the market and price.

The second impediment is...

7/3,K/17   (Item 1 from file: 810)
DIALOG(R)File 810:Business Wire
(c) 1999 Business Wire . All rts. reserv.

0828533   BW0228

EXPERIAN FIRST FRANKLIN: First Franklin Selects Experian ValuePoint to
   Streamline Appraisals

March 31, 1998

Byline: Business Editors

   ANAHEIM, Calif.--(BUSINESS WIRE)--March 31, 1998--First Franklin
has selected Experian Real Estate Solutions' ValuePoint as an
automated valuation model for use in its Express Valuing initia
tive,
a streamlined property valuation process for originating

non-conforming loans in California, Arizona, Colorado, Nevada and
Florida.

A component of Experian RES' Windows to Property Data software
platform, ValuePoint uses the comparable sales approach to property
valuation, accessing both subject property and recent sales
information directly from...
...ESTATE
BANKING
Today's News On The Net - Business Wire's full file on the Internet
                with Hyperlinks to your home page.
                URL: http://www.businesswire.com
>

7/3,K/18   (Item 1 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

02138524   SUPPLIER NUMBER: 20101986   (USE FORMAT 7 OR 9 FOR FULL
TEXT)
Fighting crime with data. (Pittsburgh Police Department) (Government
 Activity)
Schmitt, Steve J.
Communications News, v34, n12, p52(1)
Dec, 1997
ISSN: 0010-3632   LANGUAGE: English   RECORD TYPE: Fulltext; Abstract
WORD COUNT: 525   LINE COUNT: 00047

...   user basis instead of having to buy the equipment up-front and
maintain it in-house.
     In other words, the pricing arrangement is very similar
to the cellular phone service model with which most people are
familiar. Monthly pricing for wireless data has allowed our organization...

...DESCRIPTORS: Wireless Network
19971200

7/3,K/19   (Item 2 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01671572   SUPPLIER NUMBER: 15074144   (USE FORMAT 7 OR 9 FOR FULL
TEXT)
Portfolio accounting/management systems. (Buyers Guide)
Wall Street & Technology, v11, n8, p84(20)

...   flexibility, automated asset allocation. AIMR daily performance, accruals and analytics. The integrated, modular system solution.
Internet Systems Corp. 180 N. Stetson, 42nd Fl., Chicago, IL 60601; Contact Mitch Piatek; 312/540...

...include for forex confirmation matching/netting (ACCORD); cash reconciliation (NOSTRO); bulk data transfer (IFT); and network interface/communications software (ST200 - Unisys, ST400 - Vax, and Alliance - UNIX).
Sanchez Computer Associates 40 Valley...

...line integrated fixed income and mutual funds securities processing system supporting Bank Capital Markets and Broker/Dealer subsidiaries for Trading, Portfolio, and Safekeeping. Combines with SunGard's Front Office System to...line integrated fixed income and mutual funds securities processing system supporting Bank Capital Markets and Broker/Dealer subsidiaries for Trading, Portfolio, and Safekeeping. Combines with SunGard's Front Office System to...

...second trade, commission and accounting information. It includes comprehensive securities processing, an extensive data communications network and a wide array of application-based services. OLTS is ADP's real-time system...

...P.O. Box 51882, Durham, NC 27717; Contact Carl Lindner; 919/490-6188
B/DOS (Broker Dealer Operating System)
IBM PC Clone, MS DOS, PC/DOS Generates focus reports (IA, IIA... include for forex confirmation matching/netting (ACCORD); cash reconcillation (NOSTRO); bulk data transfer (IFT); and network interface/communications software (ST200-Unisys, ST400 - Vax, and Alliance - UNIX).
SECURITY APL INC.
Security APL...

...IBM System provides automated portfolio management and performance measurement systems to independent investment advisors, banks, broker /dealers and insurance companies. Includes transaction, realized gain/loss, and investment income summaries.
Shaw Data...on-line integrated securities processing system supporting bank Section 20 subsidiaries, full service brokerage firms, broker/dealers and discount brokers.

Systems Development Corp. 19 S. LaSalle St., Ste. 1500, Chicago, IL
...

...trade date with a proven system of trade order allocations.
    OASYS Global
    An international, electronic network for confirming securities
trades. Eliminates time-consuming paper tickets and phone calls, greatly
reducing the...

...TradeWind
    Windows, SQL, Major operating systems Multi-currency general ledger
and information management system for broker/dealer operations.
Downloads service bureau data for inhouse reporting and ad-hoc querying.
    World Data...

...hoc reporting, integrates with Performance, Trade & Order Control and
Research Modules.
    CrossCom Fixed Income Trading Network, Inc. 200 Berwyn Park,
Ste. 110, Berwyn, PA 19312; Contact Alan Rudolph, VP; 215/644-9999,
800/682-2748, Fax: 215/647-4329
    CrossCom Fixed Income Trading Network, Inc.
    CrossCom enables qualified institutional investors to trade directly
and anonymously with other institutions and...worldwide to manage $750
billion in assets. With a flexible report writer and local area
network technology, PORTIA offers real-time portfolio reporting
analytics, trading, accounting, and operations. User defined fields...

...different platforms categorized by DOS-based LANs (Novell, Banyan Vines,
IBM Token Ring/IBM PC Network), OS/2, SCO UNIX. Hardware platforms
include IBM, SUN Microsystems, NCR, Digital, Hewlett Packard, Pyramid...
software system chosen by 200 clients worldwide. With a flexible report
writer and local area network technology, PORTIA offers real-time
portfolio reporting, analytics, trading, accounting, and operations - as
well as...

...416/882-0575
    TTOPS (Treasury Trading & OPerations System)
    IBM PC, WAN or LAN DOS based network
    TTOPS has been designed for money market and foreign exchange traders
in regional or internatioal...

...reports, TODO system, phone management, mail merge, links with
transaction vendors, pricing services.
    Financial Information Network, Inc. P.O. Box 7954, Van Nuys, CA
91409; Contact Robert McGillivray; 818/782-0331...pp. 35, 60
    Investment Manager's Workstation

Windows, Sybase, OS/2, UNIX, Single user and Network versions

Multi-currency order generation and trade management system offering on-line processing of executions...

...7255, Fax: 714/756-1246, See ad p. 126

Portfolio Manager

IBM & Compatible, Windows, any network

Cross reference, extensive reporting, word processing, cash management, pull down menus, performance tracking, asset allocation, income schedules, P&Ls, complete client management, tickler lists, single user and network versions available.

PORTIA[R]

Portia, Thomson Investment Software, 11 Farnsworth St., Boston, MA 02210; Contact...include for forex confirmation matching/netting (ACCORD); cash reconciliation (NOSTRO); bulk data transfer (IFT); and network interface/communications software (ST200 - Unisys, ST400 - Vax, and Alliance - UNIX).

SS&C SECURITIES SOFTWARE & CONSULTING...

...different platforms categorized by DOS-based LANs (Novell, Banyan Vines, IBM Token Ring/IBM PC Network), OS/2, SCO UNIX. Hardware platforms include IBM, SUN Microsystems, NCR, Digital, Hewlett Packard, Pyramid...

...IBM System provides automated portfolio management and performance measurement systems to independent investment advisors, banks, broker /dealers and insurance compaanies.

Sendero Corp. 7272 E. Indian School Rd., Ste. 300, Scottsdale, AZ... software system chosen by 200 clients worldwide. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analysis, trading, accounting, and operations as well as...

...second trade, commission and accounting information. It includes comprehensive securities processing, an extensive data communications network and a wide array of application-based services.

Computer Aided Decisions 31 Milk St.m...pp. 35, 60

Investment Manager's Workstation

Windows, Sybase, OS/2, UNIX, Single user and Network versions

Multi-currency order generation and trade management system offering on-line processing of executions...

...worldwide to manage $750 billion in assets. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations. User defined fields...different platforms categorized by DOS-based LANs (Novell, Banyan Vines, IBM Token Ring/IBM-PC Network), OS/2, SCO UNIX.

Hardware platforms include IBM, SUN Microsystems, NCR, Digital Hewlett Packard, Pyramidsystem chosen by 200 clients worldwide. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations - as well as...

...options and FX fund processing. Services may Include trade input and tracking, trade data reporting, broker and bank reconcilements, settlements pricing, financial and net as set value reporting.

PHOENIX SYSTEMS INC...Partnership Portfolio System
DOS, LAN

Manages large, complex portfolios used in limited partnerships (LBO's, real estate). Fund model generates investment records. Allows reporting by investment , investor, fund, etc, on cost, diluted and valuation bases. Performs individual buy/sell transactions. Integrates with Proprietary Investor Contact System to produce complex...pp. 35, 60

Investment Manager's Workstation

Windows, Sybase, OS/2, UNIX, Single user and Network versions Multi-currency order generation and trade management system offering on-line processing of executions...

...7255, Fax: 714/756-1246, See ad p. 126

Portfolio Manager

IBM & compatible, Windows, any network Cross reference, extensive reporting, word processing, cash management, pull down menus, performance tracking, asset allocation, income schedules, P&Ls, complete client management, tickler lists, single user and network versions available.

PORTIA[R]

Portia Thomson Investment Software, 11 Farnsworth St., Boston, MA 02210; Contact...

...worldwide to manage $750 billion in assets. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations. User defined fields...pp. 100, 111

PORTIA

386/486 based IBM PC or Compatible; SUN SPARCstation; most DOS-Comparable local area networks; DOS, Windows 3.1, or UNIX; SYBASE Relational database

Comprehensive, real-time...IBM PC/PS2 Automates all aspecvs of a bank's activities as issuing/pay/transfer agent for fixed income securities. The system consists of a DEC VAX-based back-office system... include for forex confirmation matching/netting (ACCORD); cash reconciliation (NOSTRO); bulk data transfer (IFT); and network

interface/communications software (ST200-Unisys, ST400 - Vax, and Alliance - UNIX).

SunGard Asset Management Systems 210...

19940100

7/3,K/20   (Item 3 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01582852   SUPPLIER NUMBER: 13363890   (USE FORMAT 7 OR 9 FOR FULL
TEXT)
Portfolio accounting/management systems. (1993 edition) (Buyers Guide)
Wall Street & Technology, v10, n5, p94(19)
Jan, 1993
DOCUMENT TYPE: Buyers Guide   ISSN: 1060-989X   LANGUAGE: ENGLISH
RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 20362 LINE COUNT: 01902

...   flexibility, automated asset allocation, AIMR daily performance,
accruals and analytics. The integrated, modular system solution.
    Internet Systems Corp., Chicago, IL
    Atlas
    Is a software system that supports transaction capture, accounting,
risk...

...securities processing system supporting bank capital market groups,
Section 20 subsidiaries, full service brokerage firms, broker
/dealers, and discount brokers.
    SunGard Financial Systems Inc., Hopkins, MN
    BOLT
    IBM Mainframe, IBM AS...
...second trade, commission and accounting information. It includes
comprehensive securities processing, an extensive data communications
network and a wide array of application-based services. OLTS is ADP's
real-time system...manual entry by interfacing with any general ledger,
loan, deposit or investment system.
    National Computer Network, Chicago, IL
    EOD-DATA
    All PCs
    End of day prices and dividends for back office...

...IBM
    System provides automated portfolio management and performance
measurement systems to independent investment advisors, banks, broker

45

/dealers and insurance companies. Includes transaction, realized gain/loss, and investment income summaries.

Secutron Corp...

...securities processing system supporting bank capital market groups, Section 20 subsidiaries, full service brokerage firms, broker /dealers, and discount brokers.

SynCon Solutions, Inc., 30 Deerfield Lane S., Pleasantville, NY 10570; Contact...facilitate trade settlement. Alert helps eliminate settlement problems and Dks.

OASUS U.S.

An electronic network which allows traders to prematch their orders on trade date with a proven system of trade order allocations.

OASYS Global

An international, electronic network for confirming securities trades. Eliminates time-consuming paper tickets and phone calls, greatly reducing the...

...TradeWind

Windows, 3QL, Major operating systems Multi-currency general ledger and information management system for broker/dealer operations. Downloads service bureau data for inhouse reporting and ad hoc querying.

World Data...

...currency data base environment, processing a full range of security types.

CrossCom Fixed Income Trading Network, Inc., 200 Berwyn Park, Suite 110, Berwyn, PA 19312; Contact Alan D. Rudolph, VP; 215...

...682-2749, Fax: 215/647-4329 See Advertisement Pages 6-7

CrossCom Fixed Income Trading Network, Inc.

CrossCom enables qualified institutional investors to trade directly and anonymously with other institutions and broker-dealers around the world. Corporate, high yield and other fixed income securities can be easily...different platforms categorized by DOS-based LANs (Novell, Banyan Vines, IBM Token Ring/IBM-PC Network), OS/2, UNIX, XENIX, and VMS. Hardware platforms include IBM, Sun Microsystems, NCR, Digital, Hewlett...

...software system chosen by 200 clients worldwide. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations - as well as...416/882-0575

TTOPS (Treasury Trading & OPerations System)

IBM PC, WAN or LAN DOS based network

TTOPS has been designed for money market and foreign exchange traders in regional or international...Eric Peters; 714/261-7255, Fax: 714/756-1246

Portfolio Manager

IBM & compatible, Windows, any network Cross reference, extensive reporting, word processing, cash management, pull down menus, performance tracking, asset allocation, income schedules, P&Ls, complete client management, tickler lists, single user and network versions available.

Princeton Financial Systems, Inc., 500 College Road East, Princeton, NJ 08540; Contact Gordon...

...different platforms categorized by DOS-based LANs (Novell, Banyan, Vines, IBM Token Ring/IBM-PC Network), OS/2, UNIX, XENIX, and VMS. Hardware platforms include IBM, Sun Microsystems, NCR, Digital, Hewlett...
IBM

System provides automated portfolio management and performance measurement systems to independent investment advisors, banks, broker /dealers and insurance companies.

Sendero Corp., 7272 E. Indian School Road, #300, Scottsdale, AZ 85251

...

...software system chosen by 200 clients worldwide. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations - as well as...second trade, commission and accounting information. It includes comprehensive securities processing, an extensive data communications network and a wide array of application-based services.

Andersen Consulting-INVEST/1, 1 Financial Plaza...different platforms categorized by DOS-based LANs (Novell, Banyan Vines, IBM Token Ring/IBM-PC Network), OS/2, UNIX, XENIX, and VMS. Hardware platforms include IBM, Sun Microsystems, NCR, Digital, Hewlett...

...software system chosen by 200 clients worldwide. With a flexible report writer and local area network technology, PORTIA offers real-time portfolio reporting, analytics, trading, accounting, and operations - as well as...Partnership Portfolio System

DOS, LAN

Manages large, complex portfolio used in limited partnerships (LBO's, real estate). Fund model generates investment records.
Allows reporting by investment, investor, fund, etc, on cost, diluted and valuation bases. Performs individual buy/sell transactions.
Integrates ...Fax: 212/742-8890

ARTS CIS-Customer Information System

All PC's & Unix

Download driven broker book and productivity system. Security and multi-user administration of all features and report. Portfolio, broker book, customer interest database, prospecting tools.

Andersen Consulting-INVEST/1, 1 Financial Plaza, Hartford, CT...

...416/882-0575

TTOPS (Treasury Trading & OPerations System)

IBM PC, WAN or LAN DOS based network

TTOPS has been designed for money market and foreign exchange traders
in regional or international...

...Accomodates any accounting method and can be customized to meet
individual reporting requirements.

Financial Information Network, Inc., Box 7954, Van Nuys, CA
91409; 818/782-0331, Fax: 818/376-4095

Portfolio...Eric Peters; 714/261-7255, Fax: 714/756-1246

Portfolio Manager

IBM & compatible, Windows, any network Cross reference,
extensive reporting, word processing, cash management, pull down menus,
performance tracking, asset allocation, income schedules, P&Ls, complete
client management, tickler lists, single user and network versions
available.

Princeton Financial Systems, Inc., 500 College Road East, Princeton,
NJ 08540; Contact Gordon...

...software system chosen by 200 clients worldwide. With a flexible report
writer and local area network technology, PORTIA offers real-time
portfolio reporting, analytics, trading, accounting, and operations - as
well as...return and fully automated cancellation of loans, returns or
mark-to-market. Multi-currency capabilities.

Internet Systems kCorp., Chicago, IL

Atlas

Is a comprehensive, fully integrated system that includes transaction
capture...

...416/882-0575

TTOPS (Treasury Trading & Operations System)

IBM PC, WAN or LAN DOS based network

TTOPS has been designed for money market and foreign exchange traders
in regional or international...PC/PS2

A utomates all aspects of a bank's activities as
issuing/paying/transfer agent for fixed income securities. The system
consists of a DEC VAX-based back-office system...

19930100

7/3,K/21   (Item 4 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01239658   SUPPLIER NUMBER: 06281798   (USE FORMAT 7 OR 9 FOR FULL TEXT)
PS-2 turns 1. (The first year of the PS-2 family)
Tallman, Douglas
PC Tech Journal, v6, n4, p48(6)
April, 1988
ISSN: 0738-0194   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 3941   LINE COUNT: 00304

...   PS/2 products are now available for most tasks: several vendors are
selling VGA enhancers, network interface cards, PC-to-mainframe
communications cards, tape-backup systems, add-on memory, and mass...use,
but it is a meager allotment when you consider adding 2MB of memory, a
network adapter, and improved graphics capabilities.
    Few would dispute that 3.5-inch diskette drives are...for the AT,
too, from third-party vendors. ATs (with caching) and Model 50s performed
similarly in several PC Tech Journal tests despite the Model 50's
significant improvements in interleave...

...Travelers umbrella use 20,000 personal computers. At that level, The
Travelers can offer in-house service and can buy at volumes that give
no pricing advantage to compatibles.
    As for Model 80s, Correira said The Travelers has about half a
dozen, used as file servers, and...

19880400

7/3,K/22   (Item 5 from file: 275)
DIALOG(R)File 275:Gale Group Computer DB(TM)
(c) 2006 The Gale Group. All rts. reserv.

01211738   SUPPLIER NUMBER: 04790151   (USE FORMAT 7 OR 9 FOR FULL TEXT)
Compatibles prosper, but some experts still see risk in look-alike
  purchases.
Pepper, Jon
PC Week, v4, n17, p98(1)
April 28, 1987
ISSN: 0740-1604   LANGUAGE: ENGLISH   RECORD TYPE: FULLTEXT; ABSTRACT
WORD COUNT: 1184   LINE COUNT: 00093

...   before they can be seriously considered.
    "Before we make a substantial purchase of a particular model,

we try to bring an evaluation unit in-house to make sure it
will run the software we need and [will] interface with the...

...with IBM's performance, but because no one has ever been fired for
buying IBM."
   Similarly, Virginia Beaudrot, a systems specialist with Tenneco
Oil Co. in Houston, explained Tenneco is dedicated...

...t exactly moot, but they are certainly becoming more so," said Mr.
Roberts.
   "Even in network situations, we know that Lockheed is buying a
large number of low-priced PC clones for network installations all
over the world, and they haven't had any problem."
   Some things cut out of the compatibles' BIOS design had caused
problems with other products in network situations, Mr. Roberts
explained.
   "There were some BIOS calls that were in the IBM BIOS...

...cut these out because they didn't seem necessary," he said.
   "When the Token-Ring [Network] came out, of course, it followed
that there were problems with some of

19870428

 7/3,K/23   (Item 1 from file: 476)
DIALOG(R)File 476:Financial Times Fulltext
(c) 2006 Financial Times Ltd. All rts. reserv.

0010563421 ACxxxxxx0128
PROPERTY MARKET: Clicks and mortar take off: Analysts are experimenting
  with ways of assessing the value of companies that straddle technology
  and real estate
NORMA COHEN
The Financial Times, London Edition 1 ED, P 32
Friday, September 15, 2000
DOCUMENT TYPE: NEWSPAPER; Columns LANGUAGE: ENGLISH RECORD
TYPE:
FULLTEXT
Word Count: 879

2000

...of Andrew Ruhan, the company's founder.

Broadly speaking co-location is an arrangement where internet data

service providers lease space in data centre racks to customers, who, in turn, provide and manage their own network equipment.

Analysts at Merrill Lynch - also brokers to Chelsfield - estimate the newly emerging Global Switch...
...of Chelsfield, using a valuation methodology that looks at the fair value/sales multiples of similar operating companies that are not also in the real estate business. Similarly, analysts at JP Morgan estimate that based only on the three telehousing centres already owned...

...there are none with identical business plans and strategies, there are several that are sufficiently similar to provide a basis for comparison.

TeleCity, a recently floated co-location provider, is also...

...differences between the businesses but the differences between the valuation methodology used for two broadly similar businesses and the potential for the market to misunderstand the value of either.

Deutsche Banc Alex Brown has tried to grapple with a valuation methodology that will allow investors to understand the technology businesses of real estate companies through a new "blended" valuation model.

In a research report, analysts attempt to assign several different values to the shares of...
...largest is its 50 per cent stake in MerchantWired.

Ms Young adds that Simon's internet activities make its business model closer to, say, Amazon.com, than that of a pure...

...the real estate and technology businesses each using multiples at which shares in companies in similar businesses trade.

The exercise adds Dollars 7.82 to Simon Property Group's projected share...

7/3,K/24   (Item 2 from file: 476)
DIALOG(R)File 476:Financial Times Fulltext
(c) 2006 Financial Times Ltd. All rts. reserv.

0010038229 B0JESAPAEDFT
INSIDE TRACK: Treading warily in search of net profit: IT FREE
  INTERNET SERVICE PROVIDERS: Freeserve's success may not mean it has
  the perfect business model, write Christopher Price and Louise Kehoe

LOUISE KEHOE, CHRISTOPHER PRICE
Financial Times, London Edition 1 ED, P 14
Wednesday, May 19, 1999
DOCUMENT TYPE: Features; NEWSPAPER LANGUAGE: ENGLISH RECORD
TYPE:
FULLTEXT
Word Count: 1,147

INSIDE TRACK: Treading warily in search of net profit: IT FREE
  INTERNET SERVICE PROVIDERS: Freeserve's success may not mean it has
  the perfect business model, write...
1999

TEXT:
Free dial-up internet access may be good news for consumers, but the
companies offering these services face several...

...avoid becoming victims of their own success.

How loyal will customers of the "subscription-free" internet service
providers (ISPs) be? How vulnerable will the operators be to new methods of
accessing the internet, or to users' ability to bypass the operators'
lucrative home pages? Ultimately, which of the...

...is already littered with corporate casualties - victims of a defective
business model.

Uncharacteristically for the internet, the pointers are coming not
from the US but from the UK - the most developed internet market in
Europe - which in the past few months has become a test-bed for
subscription-free internet services. Companies offering fee-based
services in the rest of Europe and in the US...

...the UK were first raised last year by Freeserve, the first mass-market
subscription-free internet access service. Owned by Dixons, the
country's largest computer retailer, Free-serve has quickly become the UK's
biggest ISP, accounting for one in five of all internet users.
Software is available, free of charge, at any of Dixons' town centre
stores.

The...

...on the market: under pressure to match Freeserve's membership terms,
more than 40 UK internet service providers have followed suit.
America Online, the big US online service provider and the...
...free local calls and a flat monthly fee.

At the same time, the number of internet services is estimated to
have fallen by a third to around 200. Many of those...

...offer additional services, such as web site hosting, to retain
customers.

The potential for developing similar free internet access
elsewhere varies. In Europe as a whole, falling charges and free access are
driving the rapid uptake in internet usage, and there seems little
doubt that the market will grow rapidly.

According to International Data Corp, the US market research group, the
number of internet users in the region was 24m in 1997 and is
forecast to rise to 67m...

...UK, however, the entrenched position of many of the former national
telecoms operators in the internet access market has been a barrier
to competition.

In the US, where consumers typically pay about Dollars 20 a month for
internet access, attempts to provide "non-fee" services have
collapsed. Different price structures for telephone services...

...to be dictating, more than anything else, how much consumers are willing
to pay for internet services and what business models are applicable
in different markets.

In the US, for example...

...calls. Moreover, in the British model telephone companies share a
portion of call revenues with internet service providers - giving the
latter an additional revenue stream.

US and continental European ISPs get no such bonus. However, new entrants
to the internet service market in Germany, for example, have used the
very low margin on the interconnect rate (payable to their telecom company)
as a lever to offer free internet access and reduced local telephone
call rates. This has enabled them to compete effectively with...

...and subscription-based ISPs have got their sums right. According to
Granville, the UK research house: "The current ISP pricing
model is unsustainable moving forward and this will depress trading
performance by ISPs."

So far, most have slavishly followed the Freeserve model, replacing

their subscription revenues with those from advertising and e-commerce activities. Each has developed its own "home page" or portal - a gateway to the internet that offers services, such as news, share price quotes and games.

By building a large...

...actually are," says Nick Gibson of Durlacher, the UK research house. To steal customers, some internet services are beginning to offer lower call charges. Recently, Localtel, a small telecoms reseller, launched a subscription-free internet service with free off-peak calls.

* Users can bypass that service's own home page, reducing its potential for advertisers, in favour of another internet portal such as Yahoo! or Excite. Internet community sites such as iVillage, GeoCities and FortuneCity.com, geared to the interests of a...

...observers at least - undermine and eventually replace the PC as the main conduits for consumer internet access. That would have a profound effect on the ISPs - not least because their portals...

DESCRIPTORS: Internet;

7/3,K/25   (Item 1 from file: 610)
DIALOG(R)File 610:Business Wire
(c) 2006 Business Wire. All rts. reserv.

00397316 20001030304B4531 (USE FORMAT 7 FOR FULLTEXT)
Myers Internet Services Launches Originator Network